

**EFFECTIVENESS OF MUSIC THERAPY ON  
DEPRESSION AMONG DEPRESSIVE PATIENTS AT  
SELECTED PSYCHIATRIC HOSPITALS,  
COIMBATORE**

**REG. NO. 30101441**

A Dissertation Submitted to  
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In Partial Fulfillment of the Requirement for the

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LEVEL OF DEPRESSION

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## **Abstract**

The aim of the study was to find out the effectiveness of music therapy on depression among depressive patients at selected psychiatric hospitals, Coimbatore. The design used for this study was quasi experimental pre test post test with control group design. A purposive sample of 12 patients with depression was recruited for the study. Music therapy was administered to the patients. Zung depression rating scale was used to assess the level of depression before and after music therapy. The data gathered was statistically analyzed to test the hypotheses. The result revealed that there was a significant difference in the level of depression before and after music therapy. Hence, the study concluded that music therapy is found to be an effective therapy in reducing the level of depression.

## **Effectiveness of Music Therapy on Depression among Depressive Patients at Selected Psychiatric Hospitals, Coimbatore**

It's quite obvious that without mental health the health of the individual is considered to be incomplete. But still mental health has been ignored by both the public and private health sector.

Mental health is a source which facilitates a nation to understand their logical and poignant prospective to discover and accomplish their roles in communal and working environment. For the community good mental health of people contributes to affluence, solidarity and social integrity. Inconsistent and low levels of mental health oblige manifold costs, losses and burdens on citizens and societal systems.

Mental illness is defined as any disease of the mind, the psychological state of someone who has emotional or behavior problems serious enough to require psychiatric intervention (Sliwka, 2006).

Depression is most common mental disorder. Depression is the state of low need and aversion to activity that can affect a person's thought, behaviour feeling and physical wellbeing. The causes of depression are not entirely understood, but are thought to be multi-factorial in which inheritance is an important factor in major depression. Depression is believed to be caused by an imbalance in the neurotransmitters which are involved in mood regulation. A poor diet, stressful life events that overwhelm a person's ability to cope may contribute to depression. Apart

from this, some scientific studies have shown that depression is associated with decreased activity in prefrontal, frontal and temporal lobes (Nielzan, 1982).

It has been widely documented that women suffer from major depression about twice as often as men mainly because the incidence of depressive disorders peaks during women's reproductive years which is due to the hormonal factors. The major problems of depression are loss of energy and interest, diminished ability to enjoy oneself, decreased or increased sleeping or appetite difficulty in concentrating, indecisiveness, slowed or fuzzy thinking, exaggerated feelings of sadness, hopelessness, or anxiety feelings of worthlessness, recurring thoughts about death and suicide.

In many primary care settings when patients present with depression, the depression often remains undiagnosed, and even if it is diagnosed, treatment usually focuses on the other chronic diseases. Depression can be treated in primary care or community settings using locally available and cost-effective interventions.

Music therapy is as old as the hills, it has just missed the acceptable, contemporary publicity for several centuries and enclosed scientific skeptical for a very long time. Music therapy is based on associative and cognitive powers of mind. The sound creates certain vibrations which are picked up and amplified by the human ear. Music therapy is an effective and valid treatment for persons who have psychosocial, affective and communicative needs (Ashida, 2007).

Over the few decades there has been a growing interest in the use of music in a variety of health care settings, particularly in hospice and palliative areas. Music therapy is very much useful in treating depression as music has a very strong

connection with emotions. Music with a beat can stimulate brainwaves to resonate in sync with the beat, with faster beats bringing sharper concentration and more alert thinking, and a slower tempo promoting a calm mind. Moreover, change in brainwave activity levels that music can bring can also enable the brain to shift speeds more easily on its own as need. Music therapy works to treat depression because the embedded rhythm of our brain waves promotes a positive state of mind. When one is concentrating on the music he hears, he does not have the mental resources to focus on other negative thoughts because the brain is organized in such a way that thinking about one bad thing recalls another. Music provides a great intrusion and breaks this cycle, apart from that when one is listening to their favorite songs it will boost levels of the hormone dopamine and it motivate them to do things, moreover when one is listening to sad songs it will make them to feel like someone out there knows exactly how they feel and that can help one to feel less alone when they are depressed (Salimpoor, 2008).

In music therapy there are mainly two kinds which are receptive and active. In receptive music therapy, a person listens to music with a health care professional and the music can be used for relaxation and motivation and as a bridge to emotions, cognitive work, personal development, and self-reflection. In active music therapy, the patient and music therapist play improvisational music together. The patient does not need to be a skilled musician. Researcher has to use receptive music therapy because it is more feasible and more convenient. In this present study music is mainly used to treat depression were based on ragam bilahari, ragam navarasa kannada, ragam nalinakanthi and ragam gaudamallar. Mainly these ragas concentrate the pranic



energy both in the higher mental ranges and in the lower mental ranges which is the origin of depression (Bharathi, 1997).

### **1.1. NEED FOR THE STUDY**

The current population in the world is 700 crores. The statistics shows that in every 4 people or 25 % percent of individuals develop one or more mental disorder at some stage in life. Today 450 million people globally suffer from mental disorder in both developed and developing countries. Among these, 154 million suffers from depression; 25 million from schizophrenic, 91 million are alcohol dependant, and 15 million drug use disorders. In India, the point prevalence of serious mental disorders is about 10 to 20 per 1000 of the population. Recent statistics suggest regularly seven of every one hundred people suffer depression after age 18 at some point in their live. About 6 million people are affected with late life depression between their late twenties to mid-thirties.

Depression is the most affected mental disorder in India. It is the third most illness in the world after infectious disease and heart disease. By the year 2020, depression will be 2<sup>nd</sup> most common health problem in the world. For every 40 seconds a life is lost through suicide, among all suicides 40 % is mainly due to depression only (WHO, 2002).

Depression among the youth has increased from 2 % to 12 % in the last five year. It is estimated that depression exacts an economic cost of over \$30 billion each year. Nearly two third of people suffer from depression and never seek treatment. People with untreated depression have a suicide rate of about 15 %. A survey was

conducted in Malaysia which found out the main causes of depression and results were mainly due to educational failures and problem in relationships (Craig, 2009).

Depression is an important global public health problem due to both its relatively high lifetime prevalence and its significant disabilities. Depression accounted for 4.5 % of the worldwide total burden of disease. It is also responsible for the greatest proportion of burden attributable to non-fatal health outcomes, accounting for almost 12 % of total years lived with disability worldwide. Depression has the tendency to assume a chronic course, to recur, and to be associated with increasing disability over time. Respondents with depression and another chronic condition had much lower mean health scores when compared with respondents who had only a chronic condition. A study was conducted in Indian cities to find out clinical depression among psychiatric patients and the results showed that 150/1000 cases in Patiala, 128/1000 in Calcutta, 79/1000 cases in Baroda 28/1000 in Bangalore were found to be depression. Depression is a psychological condition that changes how one's thinking and feeling, and also affects his social behavior and sense of physical well-being.

Music therapy is very much useful to cure this dreadful disease. Music when it is heard it helps in releasing of adrenaline also called as epinephrine which in turn affect the brain cells termed the amygdala. Amygdala is the major emotional command center and is believed that emotions, memories are controlled and strengthened (Mythili, 1998).

Present researcher claims that music therapy is very much useful for the depression. Since music therapy is a universal language, apart from that so many

studies have clearly shown that signs of depression have reduced with music therapy and anti depressants. Researcher desire to be makes music therapy as a part of treatment for depression because it is feasible to perform in the clinical setting when comparing with other psychotherapy.

## **1.2. STATEMENT OF PROBLEM**

EFFECTIVENESS OF MUSIC THERAPY ON DEPRESSION AMONG DEPRESSIVE PATIENTS IN SELECTED PSYCHIATRIC HOSPITALS, COIMBATORE

## **1.3. OBJECTIVES**

- 1.3.1. To assess the level of depression among depressive patients
- 1.3.2. To implement music therapy to the depressive patients
- 1.3.3. To reassess the level of depression among depressive patients after music therapy

## **1.4. OPERATIONAL DEFINITION**

### **1.4.1. Effectiveness**

It refers to the change in the level of depression after implementation of music therapy to the depressive patients.

### **1.4.2. Music therapy**

Music Therapy is the prescribed use of musical interventions for the purpose of restoring, maintaining and improving emotional, physical, physiological and spiritual health and well-being of depressive patients. Ragas used are bilahari,

navarasa kannada, nalinakanthi and gaudamallar. Music therapy was given for twenty minutes during each session.

#### **1.4.3. Depression**

It refers to any change in an individual life that causes alteration in the physical, mental or emotional states assessed through the zung self rating depression scale.

#### **1.5. Assumption**

Music therapy will reduce the depression level among depressive patients.

#### **1.6. CONCEPTUAL FRAMEWORK**

Conceptualization refers to the process of developing and refining abstract ideas (Polit and Hungler, 2000). Conceptual models provide a conceptual perspective regarding interrelated phenomenon. A conceptual model broadly presents an understanding of phenomenon of interest and reflects the assumptions and philosophical views.

The conceptual framework adopted for the present study is based on modified Lydia Hall's core, care and cure model. Hall's theory has 3 major tenets. Nursing functions independently in all the 3 circles in appropriate role.

##### **1.6.1. Core Circle**

Core circle of patient care involves the therapeutic care of self and is shared with other members of health team. The motivation and energy necessary for healing exists with the patient rather than health care team. In this study the core part of the

system are factors such as age, sex, education, occupation, medical illness and general health status.

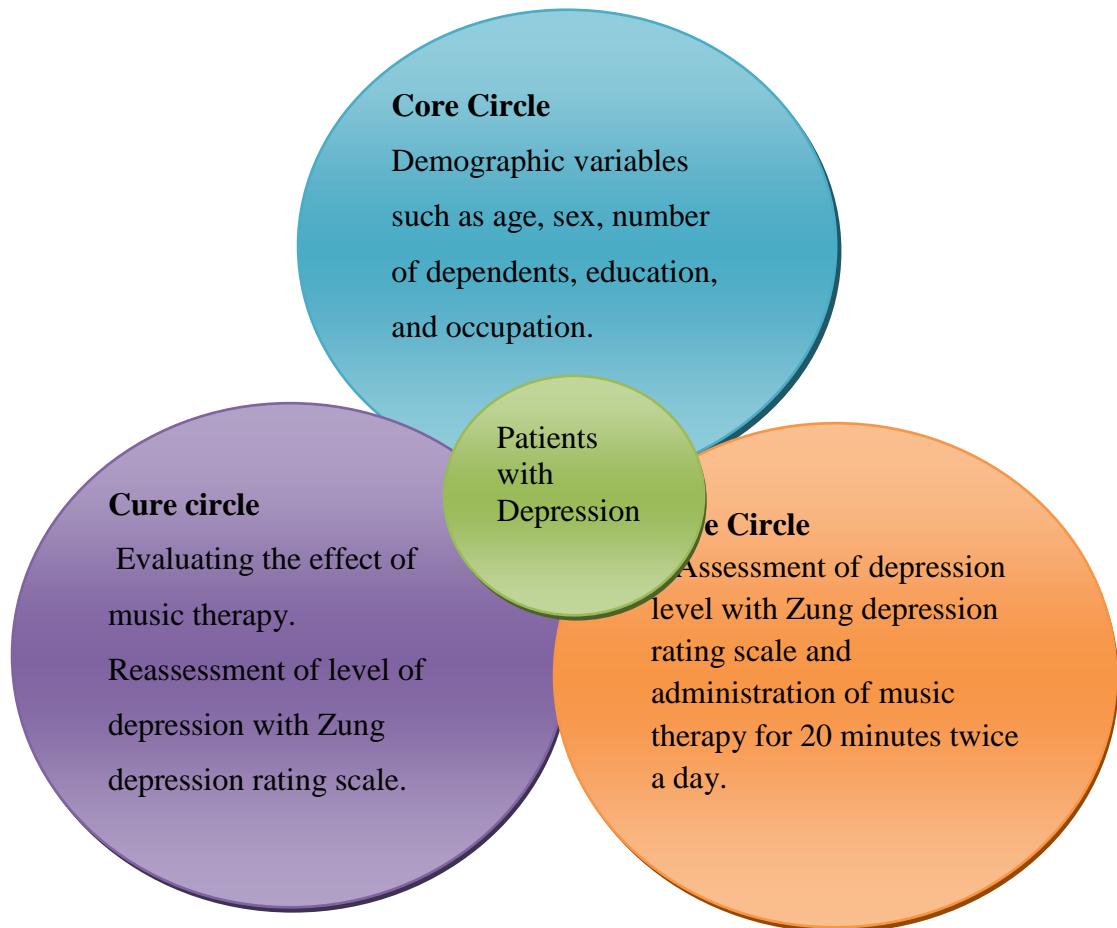
### **1.6.2. Care Circle**

Care circle represents the nurturing component of nursing and is exclusive to nursing. When functioning in care circle, the nurse applies knowledge of natural and biological sciences to provide strong theoretical base for nursing implementations. In this present study care part of system are factors such as assessment of depression and administering music therapy for depression patients for 20 minutes a day.

### **1.6.3. Cure Circle**

Cure part determines the process of reducing depression level. It represents the outcome of care being rendered. Zung depression rating scale is used to assess the depression level. The cure circle of patient care is based on pathological and therapeutic sciences and is shared with the other members of health care team. In this cure part of system are factors such as evaluating the depressive patient after music therapy administration.

**FIG. 1.1.**  
**MODIFIED CONCEPTUAL FRAMEWORK OF**  
**LYDIA HALL'S CORE, CARE, AND CURE MODEL**



### **1.7. PROJECTED OUTCOME**

The findings of the study will identify the need and effectiveness of music therapy for the depressive patients at reduction in the level of depression.

## **REVIEW OF LITERATURE**

The present chapter illustrates the literature pertinent to the study. This was included under the following headings

2.1. Literature related to depression

2.2. Literature related to Music therapy

2.3. Literature related to Music therapy on depression

### **2.1. LITERATURE RELATED TO DEPRESSION**

Poongothai (2009) conducted an epidemiological study in a rural south Indian community to assess the prevalence of depression and its associated factors. Samples for this study included 25,455 subjects and they were recruited through randomized sampling technique. Participants were screened through patient health questionnaire. The study results showed that the prevalence of depression rate as 25 % among these selected population. Depression was higher in the females (16.3 %) when compared with males (13.9 %) and participants with low income had more depression when compared with participants with high income.

Hanser (2006) conducted a study on Physical pain associated with depression. The total number of 848 samples aged between 20 to 59 was recruited for this study. Majority of samples (663) had one pain symptom and with almost three quarters (724) reporting that the pain affected mental symptoms. Among the whole samples 50 % of them discussed their painful symptoms with their physician and rest of them never discuss their pain to others and they feel that pain will disappear soon. The survey provides evidence of the association between depression and pain, highlighting the fact that pain is prevalent in this patient population.



Murray (2009) conducted study to explore association of depressive episodes and work productivity. The total number of samples participated in this community survey is 2737 adults aged between 18 and 65 years who are employed and recently employed people. The tool used for this study was World Health Organization's Health and Work Performance Questionnaire. The results indicated that people who had severe depressive episode were significantly less likely to be highly productive. Compared with people who had a moderate or severe depressive episode who did not have treatment, those who did have treatment were significantly more likely to be highly productive.

Reinhardt (2010) conducted a study to find out well being therapy (WBT) for patients with depression. well being therapy (WBT) will increase the level of psychological well being of patients and decrease vulnerability to depression. WBT is executed in 8 to 10 sessions. Sample of 40 patients was treated with WBT (20) and cognitive behavior therapy (CBT-20). They were assessed for their level of psychological well being before and after the intervention. ANOVA showed significant difference between pre and post treatment scores and WBT is more effective than CBT. The results suggested the feasibility and clinical advantage of adding WBT to the treatment of depression.

## **2.2. LITERATURE RELATED TO MUSIC THERAPY**

Rotem (2000) conducted an experimental study on the effect of music therapy on anxiety levels, pain perception and labor outcome. The samples comprised of 60 primi para mothers 30 each in experimental and control group. The relaxing music in the form as Indian classical devotional and instrumental was administered with help

of audio tape and head phones. The dependent variables assessed were anxiety, pain perception and maternal outcome in terms of duration of labor. The mothers who were exposed to music therapy experienced significantly less pain perception during labor than the control group.

Schaub (2002) studied the effect of music on pain. Older adults undergoing hip and knee surgery participant were randomly assigned to room in the orthopedic section of the hospital. Control group receive standard post operative care had a bedside compact disc player that would automatically play. Numerical rating scales used by researcher to determine the difference between pain level in the control and experimental group Analysis done by repeated measure ANOVA was used. There was a significant reduction in the number of pain medication taken post operatively in those participate who listened to music when compared with those who did not ( $f=26.93$ ,  $p=0.01$ ).

Zhonghua (2004) conducted a study to assess the effectiveness of music therapy added to standard care for people with schizophrenia. The total number of participants was 483. Self-Rating Depression Scale (SDS), Brief Psychiatric Rating Scale (BPRS), and Social Disability Schedule for Inpatients (SDSI) was used to assess the negative symptoms in the clients with schizophrenia. Music therapy was administered from 7 to 78 sessions. The results showed that after the administration of music therapy cognitive functioning and social functioning developed positively in patients with schizophrenia.

Maratos (2006) conducted a study on Music interventions for improving psychological and physical outcomes in cancer patients. The total samples used for

this study were 1891 participants. The tool used for this study is speilberger state trait anxiety scale. The participants were given music interventions, offered by trained music therapists, as well as listening to pre-recorded music, offered by medical staff for the period of 8 weeks. The results indicate that music interventions have beneficial effects on anxiety, pain, and mood in people with cancer. Furthermore, music may have an effect on heart rate, respiratory rate, and blood pressure.

### **2.3. LITERATURE RELATED TO MUSIC THERAPY ON DEPRESSION**

Guetin (1998) conducted a study was to assess the effectiveness of soft music for treatment of major depressive disorder. 25 Subjects with the major depression were selected for this study and were allowed to listen to their choice of music for 2 weeks. Depression was measured with the Zung's Depression rating Scale before the study and at two weekly post tests. Music resulted in significantly better depressive scores, as well as significantly better sub scores of depression compared with controls.

Lai (2000) conducted a study to find out Effect of music therapy on level of depression in depressive patients. In this study 15 members with depression were used for two sessions of music therapy in a day for 2 weeks. The depression level was assessed using Beck depression inventory scale. At the end of second week there is the significant improvements in depression were observed in the music therapy group as from day 1 to day 14. The effect of music therapy was sustained for up to 4 weeks after the discontinuation of sessions and these results confirm the valuable effect of music therapy on depression in depressive patients.

Payk (2000) conducted a study to find out the effect of music therapy on the treatment of depression. The total number of samples was 85 adults (18-50 years of age) with depression (ICD-10). All participants received standard care, but the experimental group offered two sessions in a day of improvisational music therapy over a period of 2 weeks. A blind assessor has measured outcomes before testing, after 2 weeks and after 2 months. The tool use for this study is Beck depression inventory scale. The results showed that the level of depression in clients has reduced significantly in experimental group when compared to control group.

Punkanen (2003) conducted a study to examine the efficacy of music therapy with standard care compared to standard care alone among people with depression and to compare the effects of music therapy for people with depression against other psychological or pharmacological therapies. The total numbers of samples used for this study were 84. The tool used for this study is Hamilton rating scale for depression. Music therapy was given for the period of 4 weeks the result showed that in which music therapy was used as an active control treatment, reported significant change in mental state for music therapy compared with standard care.

Steinberg (2006) conducted a study to exploring the listening experiences during music therapy of Outpatients with depression. The sample size was 5 and purposive sampling method was used. The five subjects underwent a total of eight sessions of individual music therapy. The tool used to find out the level of depression is Beck Depression inventory. The results showed listening experiences of music helps the client's depression level to be reduced.

Wininger (2005) conducted a study to find out the effectiveness of music therapy on depression. The samples for this study people were 60 African American and Caucasian people aged 21-65 years with depression. They were randomly assigned to a standard music group and control group and screened through zung self rating depression scale. The results revealed that experimental music group had reduction in the depression when compared with control group.

Gold (2006) conducted study to find the effect of classical music to help patients with depression to overcome the same and be in a normal acceptable emotional state. The sample size was 28 who were diagnosed as depression. Two weeks of regular exposure to music therapy sessions was given for twenty minutes a day after that depression level was reassessed. The study result had shown the greater reduction in the level of depression.

Chou (2008) conducted a study to determine the efficacy of music therapy added to standard care compared with standard care only in the treatment of depression among working-age people. There were 79 Participants with an ICD-10 diagnosis of depression were randomized to receive individual music therapy plus standard care or standard care only, and followed up at baseline, at 2 months (after intervention) and at 4 months. Participants receiving music therapy plus standard care showed greater improvement than those receiving standard care only in depression symptoms. The results of this study indicated that music therapy with its specific qualities is a valuable enhancement to established treatment practices.

## **METHODOLOGY**

The present study was designed to evaluate the effect of music therapy on depression among depressive patients at selected psychiatric hospitals in Coimbatore. The present chapter deals with the description of the research approach, research design, setting, population, criteria for sample selection, sampling, variables of the study, materials, hypothesis, pilot study, main study and techniques of data analysis.

### **3.1. RESEARCH APPROACH**

The present study aimed at determining the effect of music therapy on depression among depressive patients at selected psychiatric hospitals, Coimbatore. Hence, quantitative research approach was adopted for this study.

### **3.2. RESEARCH DESIGN**

The research design selected for the study was Quasi Experimental, Pre test – Post test Control Group Design to evaluate the effectiveness of music therapy on depression among depressive patients at selected psychiatric hospitals, Coimbatore.

### **3.3. SETTING**

The study was conducted at Naveen Hospital and Sri Krishna Nursing home, Coimbatore. During the study period, there were 13 patients with depression who were undergoing treatment in both the study setting. In Naveen hospital there are 25 beds in which psychiatric patients with the diagnosis of depression, schizophrenia, alcohol dependence, bipolar mood disorders patients were admitted. Sri Krishna Nursing home is also a 25 bedded hospital here patients with anxiety, depression,

mania, schizophrenia, alcohol dependence are admitted. In both these hospitals standard psychiatric care along with counseling is given.

### **3.4. POPULATION**

The target population for the present study was patient with depression in selected hospitals located in Coimbatore. The total population present in both the centres was 13 in number.

### **3.5. CRITERIA FOR SAMPLE SELECTION**

The sample of subjects was taken based on following inclusion and exclusion criteria.

#### *Inclusion criteria :*

The participants with following criteria were selected for the study

1. Clinically diagnosed depression patients, and those who scored >49 in Zung depression rating scale.
2. Patients who are literate.

#### *Exclusion criteria :*

The participants with the following criteria were excluded in the study

1. Patients who are not willing to participate themselves in the study.
2. Patients with any visual deformities and illiterate.
3. Patients with hearing disability.

### **3.6. SAMPLING**

Purposive sample of 12 depressive participants were selected for the study. They were randomly allocated in to experimental and control groups.

### **3.7. VARIABLES OF THE STUDY**

The independent variable in the present study was music therapy and dependent variable was depression.

### **3.8. MATERIALS**

The following materials were used for data collection.

Demographic profile to collect the personal information about patient.

Zung Depression Rating Scale (William Zung, 1989)

The tools were provided by the researcher to patients of both groups. The researcher clarified the doubts if any. Test takes about 15 to 20 minutes to assess.

3.8.1. Demographic Profile : Demographic data consists of personal information about the patient such as age of the patient, sex, marital status, education, occupation, family income and any medical disorder.

3.8.2. Zung Self Rating Depression Scale : The Zung Self-Rating Depression Scale was designed by William Zung to assess the level of depression for patients diagnosed with depressive disorder. The Zung Self-Rating Depression Scale is a short self-administered survey to quantify the depressed status of a patient. There are 20 items on the scale that rate the four common characteristics of depression: the pervasive effect, the physiological equivalents, other disturbances, and psychomotor activities. The Zung Self-Rating Depression Scale has fairly good reliability. Zung has reported a split-half reliability of 0.73. There are ten positively worded and ten negatively worded questions. Each question is scored on a scale of 1 through 4 (based on these replies: "a little of the time," "some of the time," "good part of the time,"



"most of the time"). Scores on the test range from 20 through 80. The scores fall into four ranges.

|              |   |                      |
|--------------|---|----------------------|
| 20-49        | : | Normal Range         |
| 50-59        | : | Mildly Depressed     |
| 60-69        | : | Moderately Depressed |
| 70 and above | : | Severely Depressed   |

### **3.9. HYPOTHESES**

H<sub>01</sub>: There is no significant difference in depression level among experimental and control group before music therapy.

H<sub>1</sub>: There is a significant difference in depression level among experimental group before and after music therapy.

H<sub>02</sub>: There is no significant difference in depression level among control group before and after music therapy.

H<sub>2</sub>: There is a significant difference in depression level among experimental and control group after music therapy.

### **3.10. PILOT STUDY**

Before the main study, pilot study was conducted to check the feasibility, practicability, reliability and validity. The study was conducted in Sri Naveen psychiatric hospital Coimbatore. Demographic profile collected and Zung depression rating scale were administered to assess the level of depression. Three subjects were found to have depression. Hence, the total number of subjects was randomly assigned to one group pre and post test. The group participates in the music therapy for 20 minutes a day for 10 days. A post test was conducted to assess the depression level

after music therapy. The data obtained were statistically analyzed and the result revealed that there was decrease in the depression level after 10 days of music therapy.

### **3.11. MAIN STUDY**

The data was collected for 30 days. The study was conducted in Naveen Hospital and Sri Krishna Nursing Home, Coimbatore. Demographic profile collected and zung depression rating scale were administered to assess the level of depression. A totally 12 subjects were found to have depression. Hence the total numbers of subjects were randomly assigned to experimental and control group. Experimental group participate in the music therapy 20 minutes a day for 15 days. A post test was conducted using the same tool to assess the depression level after music therapy. The data obtained were statistically analyzed and the result revealed that there was decrease in the depression level after 15 days.

### **3.12. PLAN FOR STATISTICAL ANALYSIS**

Descriptive and analytical statistics were used for statistical analysis. Demographic variables were analyzed using descriptive statistics. Paired 't' test was used to find out the significance of music therapy among depressive patients. Karl Pearson's coefficient of correlation was used to find out the relation between selected demographic variables and level of depression.

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## **DATA ANALYSIS AND INTERPRETATION**

The present chapter deals with the data analysis and interpretation. The level of depression was assessed and music therapy was implemented to the depressive patients. The data collected was grouped and analyzed using descriptive and inferential statistics in the form of tables and figures.

The study intended to find the effectiveness of music therapy on depression among depressive patients. The study was conducted in Naveen psychiatric hospital and Sri Krishna Nursing Home, Coimbatore. A total of 12 samples were participated in this study.

### **4.1. BASELINE DATA PRESENTATION**

Data collected from 12 samples were tabulated analyzed and interpreted to study the effectiveness of music therapy on depression among the depressive patients. The baseline data were age, sex, educational status, and marital status, presence of medical illness, physical illness and number of dependents.

**TABLE 4.1.**  
**DISTRIBUTION ON DEMOGRAPHIC VARIABLES OF PARTICIPANTS**

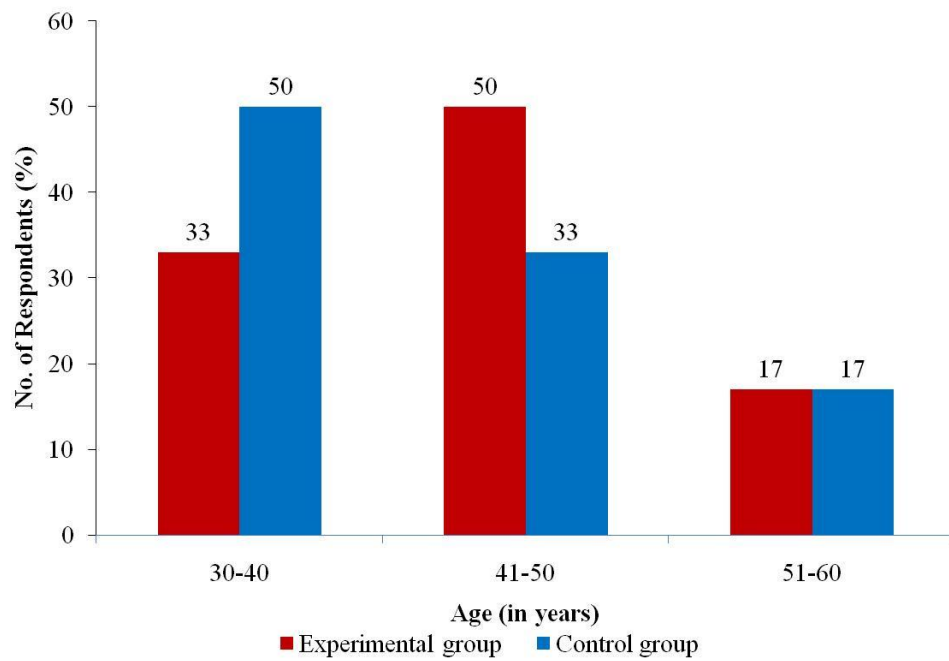
(N=12)

| <b>Demographic Variables</b>      | <b>Experimetnal Group</b>  |                       | <b>Control Group</b>       |                       |
|-----------------------------------|----------------------------|-----------------------|----------------------------|-----------------------|
|                                   | <b>No. of Participants</b> | <b>Percentage (%)</b> | <b>No. of Participants</b> | <b>Percentage (%)</b> |
| <b>Age ( in years)</b>            |                            |                       |                            |                       |
| 30-40                             | 2                          | 33                    | 3                          | 50                    |
| 41-50                             | 3                          | 50                    | 2                          | 33                    |
| 51-60                             | 1                          | 17                    | 1                          | 17                    |
| <b>Sex</b>                        |                            |                       |                            |                       |
| Male                              | 2                          | 33                    | 3                          | 50                    |
| Female                            | 4                          | 67                    | 3                          | 50                    |
| <b>Educational Status</b>         |                            |                       |                            |                       |
| Elementary                        | 2                          | 33                    | 3                          | 50                    |
| Higher secondary                  | 4                          | 67                    | 2                          | 33                    |
| Graduate                          | -                          | -                     | 1                          | 17                    |
| <b>Occupational Status</b>        |                            |                       |                            |                       |
| Sedentary                         | 2                          | 33                    | -                          | -                     |
| Moderate                          | 3                          | 50                    | 1                          | 17                    |
| Unoccupied                        | 1                          | 17                    | 5                          | 83                    |
| <b>Monthly Income (in rupees)</b> |                            |                       |                            |                       |
| Below 5000                        | 2                          | 33                    | 6                          | 100                   |
| 5000- 10000                       | 4                          | 67                    | 0                          | -                     |
| <b>Marital status</b>             |                            |                       |                            |                       |
| Married                           | 5                          | 83                    | 6                          | 100                   |
| Unmarried                         | 1                          | 17                    | 0                          | -                     |
| <b>No. of dependents</b>          |                            |                       |                            |                       |
| 1 – 2                             | 4                          | 67                    | 5                          | 83                    |
| 3 – 5                             | 2                          | 33                    | 1                          | 17                    |
| <b>Social support</b>             |                            |                       |                            |                       |
| Present                           | 4                          | 67                    | 1                          | 17                    |
| Absent                            | 2                          | 33                    | 5                          | 83                    |

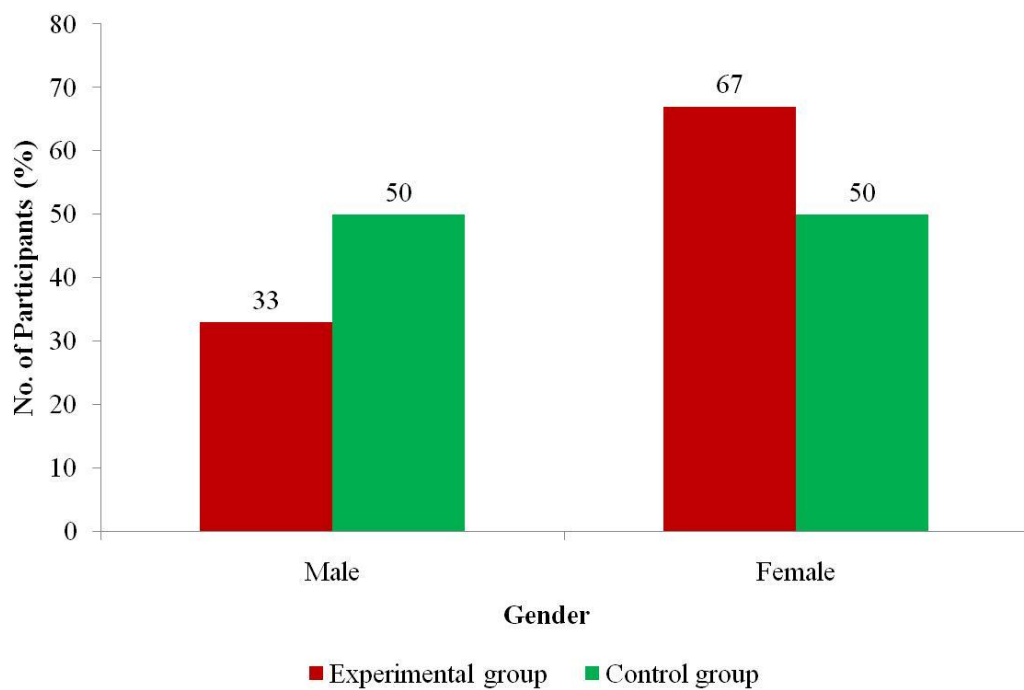
The above table shows the distribution of demographic variables in experimental and control group. With regard to age in the experimental group majority of the participants (50 %) were 41- 50 years of age, 33 % of participants were 30-40 years and 17 % of participants were 51-60 years of age, whereas in control group, 50 % of participants were from 30-40 years of group, 33 % of participants were from 41-50 years of group and remaining 17 % of participants were 51-60 years. With regard to gender 33 % were males and 67 % were female. In control group 50 % were males, 50 % were females. While considering education, in the experimental group, 67 % have completed higher secondary level and 33 % completed elementary level. In the control group, 83 % of participants were at higher secondary level and 17 % of participant was graduate. With regards to occupation, in the experimental group, 33 % were sedentary workers, 50 % were moderate workers and 17 % remained unoccupied. In the control group, 83 % were unoccupied and 17 % were moderate workers.

While considering the monthly income of the family, in the experimental group 33 % were earning below 5000 rupees and 67 % earning 5000- 10000 rupees. In the control group, majority of samples (83 %) earning below 10,000 rupees per month income and 17 % of them earning 5000 - 10000 rupees per month. With regard to marital status majority of participants (92 %) were married and 8 % were unmarried. While considering the social support in the experimental group 67 % had social support and 33 % were reported the lack in social support, in the control group 17 % had social support and remaining 83 % of the participants were reported, they had lack of social support.

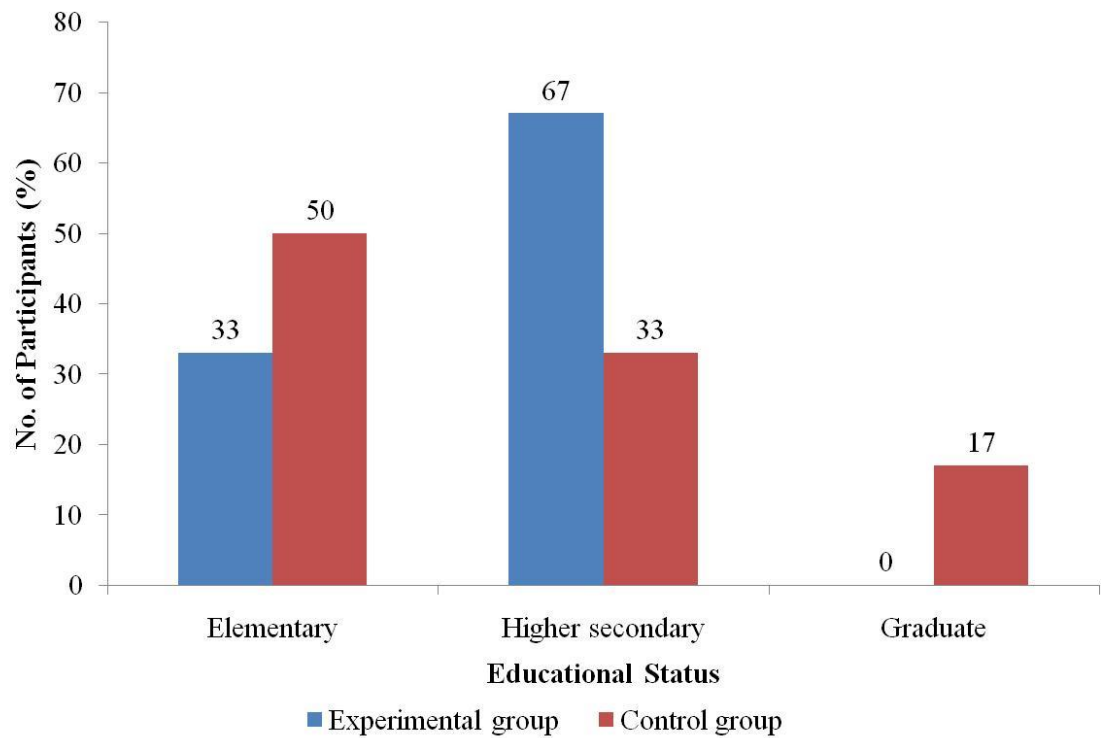
**FIG. 4.1.**  
**AGE DISTRIBUTION OF THE PARTICIPANTS**



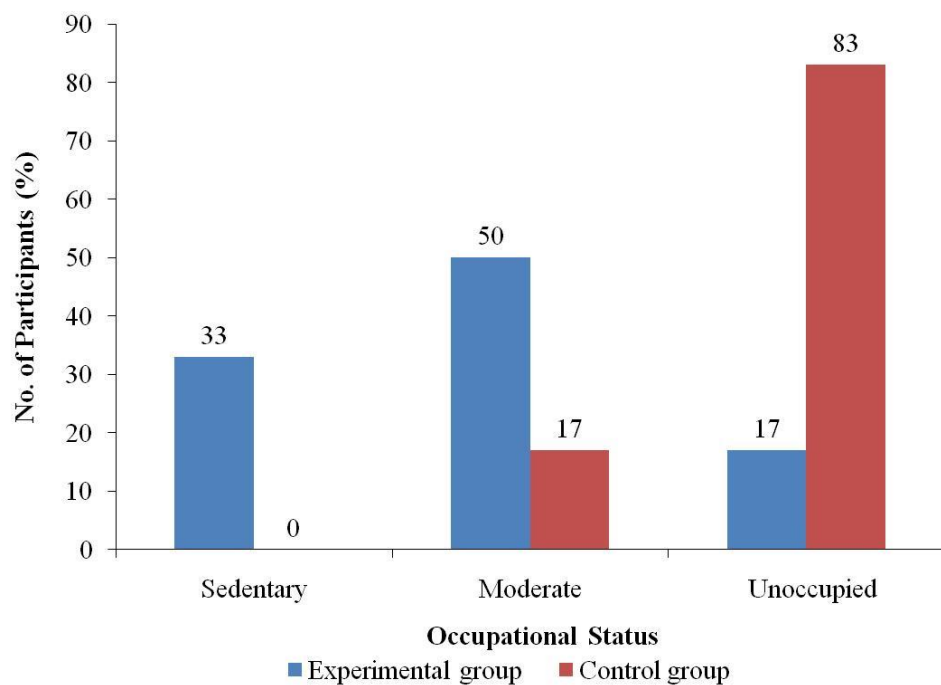
**FIG. 4.2.**  
**DISTRIBUTION ON GENDER OF THE PARTICIPANTS**



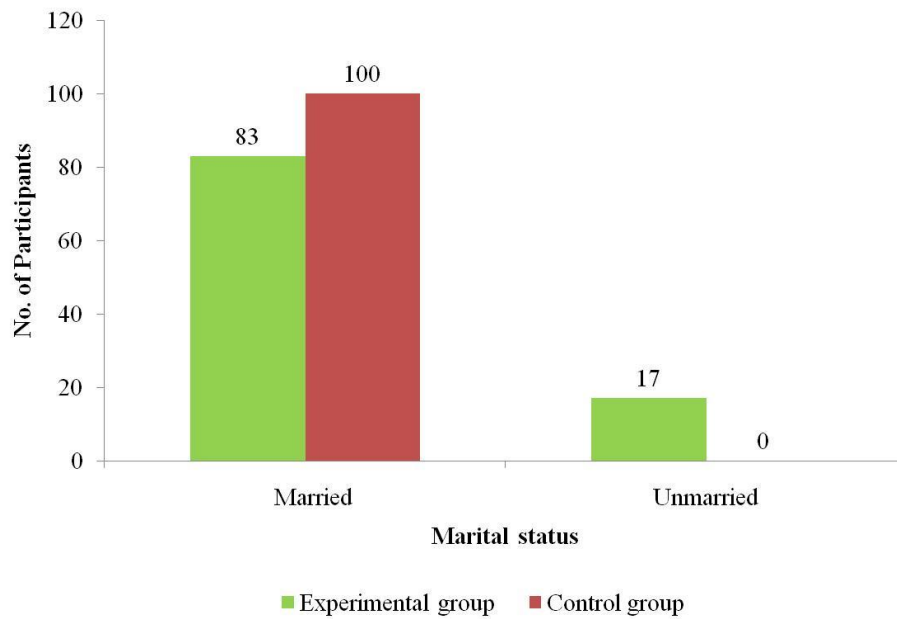
**FIG. 4.3.**  
**DISTRIBUTION ON EDUCATIONAL**  
**STATUS OF THE PARTICIPANTS**



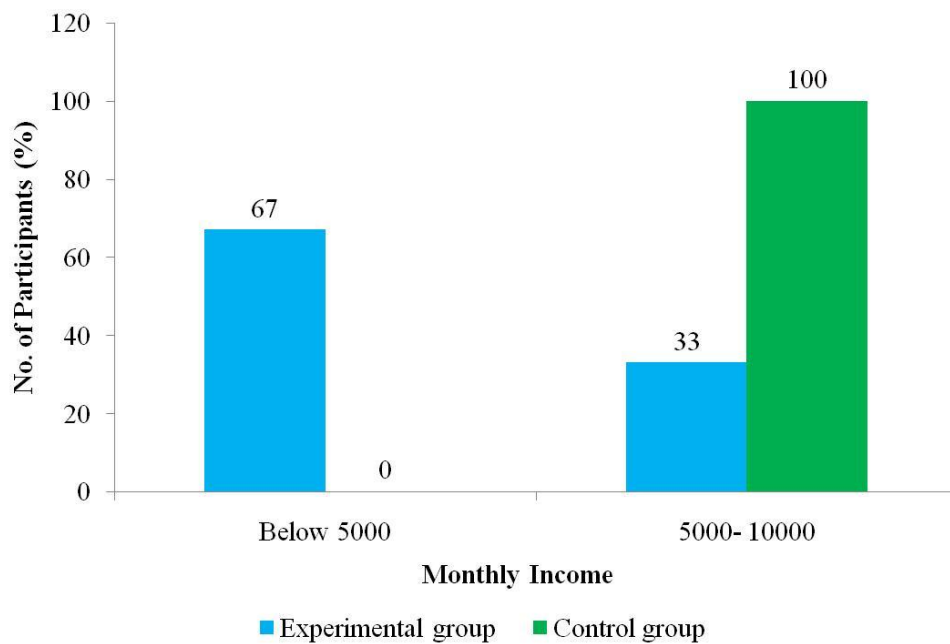
**FIG .4.4.**  
**DISTRIBUTION ON OCCUPATION OF THE**  
**PARTICIPANTS**



**FIG. 4.5.**  
**DISTRIBUTION ON MARITAL STATUS OF THE PARTICIPANTS**

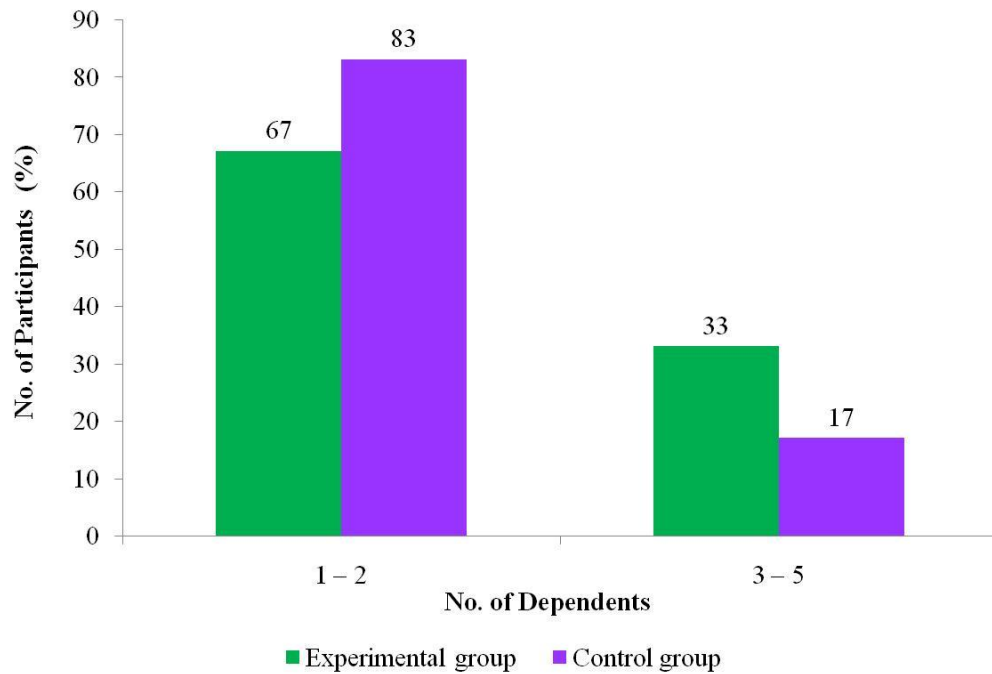


**FIG. 4.6.**  
**DISTRIBUTION ON INCOME OF THE PARTICIPANTS**

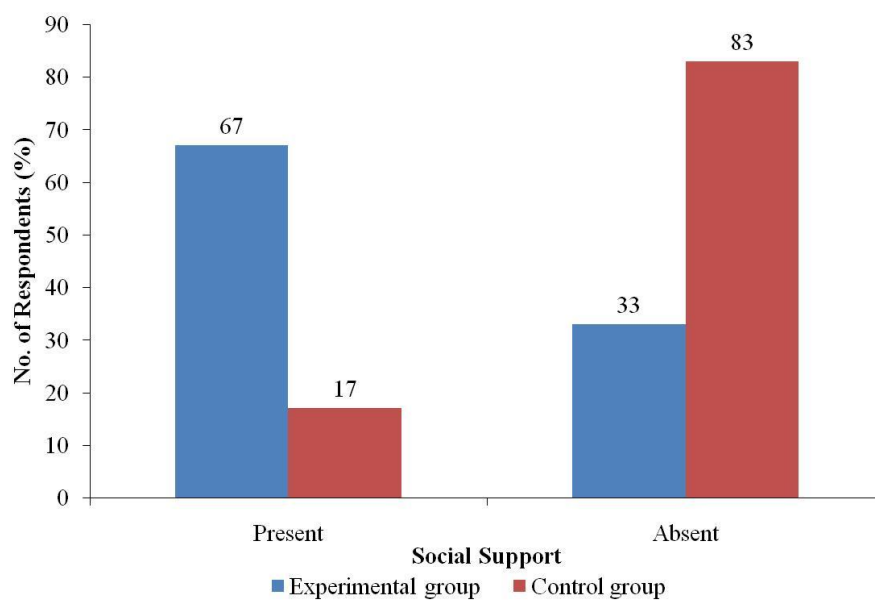




**FIG. 4.7.**  
**DISRIBUTION ON NUMBER OF DEPENDENTS**  
**OF THE PARTICIPANTS**



**FIG. 4.8.**  
**DISRIBUTION ON SOCIAL**  
**SUPPORT OF THE PARTICIPANTS**



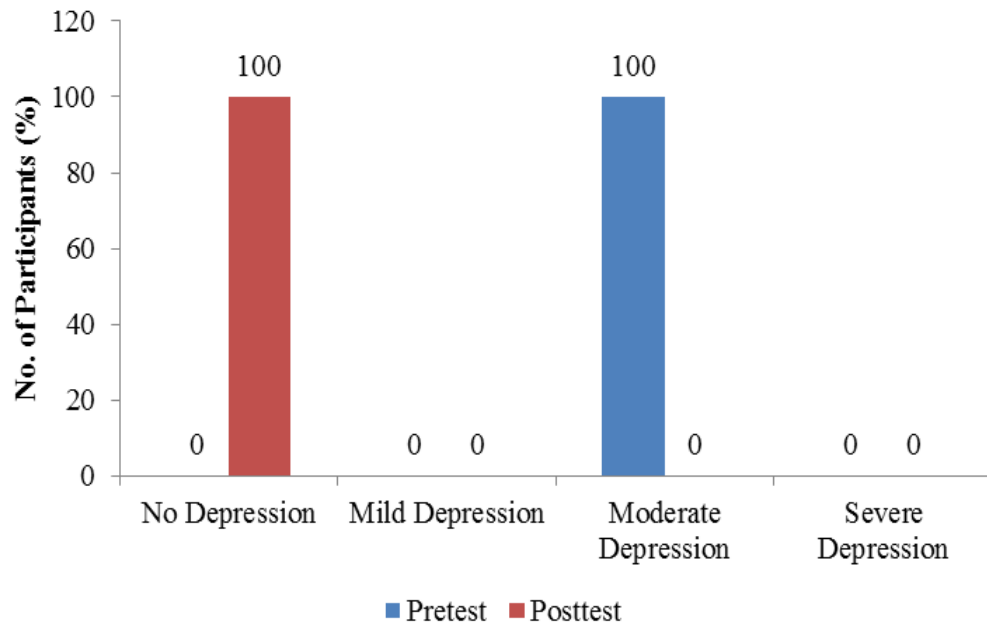
**TABLE 4.2.**  
**DISTRIBUTION OF PRE TEST AND POST TEST SCORES ON THE LEVEL**  
**OF DEPRESSION AMONG THE DEPRESSIVE PATIENTS IN**  
**EXPERIMENTAL AND CONTROL GROUP**

(N =12)

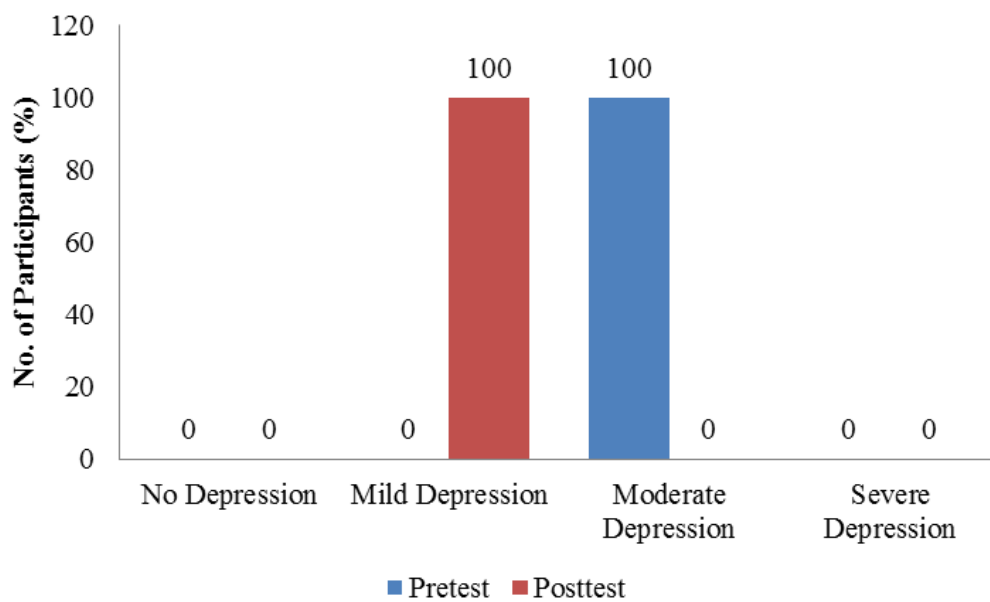
| Level of depression | Pre test           |              |                    |              | Post test          |              |                    |              |
|---------------------|--------------------|--------------|--------------------|--------------|--------------------|--------------|--------------------|--------------|
|                     | Experimental group |              | Control group      |              | Experimental group |              | Control group      |              |
|                     | No of participant  | Percentage % | No of participants | Percentage % | No of participants | Percentage % | No of participants | Percentage % |
| No depression       | -                  | -            | -                  | -            | 6                  | 100          | -                  | -            |
| Mild depression     | -                  | -            | -                  | -            | -                  | -            | 6                  | 100          |
| Moderate depression | 6                  | 100          | 6                  | 100          | -                  | -            | -                  | -            |
| Severe depression   | -                  | -            | -                  | -            | -                  | -            | -                  | -            |

The above table shows the distribution of pre test and post test level of depression among depressive patients in experimental group and control group. Regarding assessment of level of depression in pre test, in the experimental group 100 % had moderate depression and in the control group 100 % had moderate depression. Regarding assessment of level of depression in post test, in the experimental group 100 % had no depression, while in the control group 100 % had mild depression.

**FIG. 4.9.**  
**DISTRIBUTION AMONG DEPRESSIVE PATIENTS**  
**IN EXPERIMENTAL GROUP**



**FIG. 4.10.**  
**DISTRIBUTION AMONG DEPRESSIVE PATIENTS**  
**IN CONTROL GROUP**



**TABLE 4.3.**  
**COMPARISON ON THE LEVEL OF DEPRESSION AMONG DEPRESSIVE**  
**PATIENTS IN EXPERIMENTAL AND CONTROL GROUP BEFORE**  
**INTERVENTION**

(N=12)

| Level of Depression | Mean  | Mean% | SD   | 't'  |
|---------------------|-------|-------|------|------|
| Experimental Group  | 68.32 | 44.56 | 1.05 | 3.8* |
| Control Group       | 65.66 | 43.78 | 1.48 |      |

\* Significant at 0.05 level

From the above table, calculated 't' value is 3.8 and the tabulated value is 2.16 at 10 degrees of freedom with 0.05 level of significant. There is a mild difference between calculated 't' value and tabulated value. The depression level of the experimental and control group before the intervention proves the homogeneity of the groups. The calculated value was lower than the table value, thus the hypothesis  $H_{01}$ : **"There is no significant difference in depression level among experimental and control group before music therapy"** was accepted. The results shows that the treatment underwent by the patients during hospital stay also influence the depression level.

**TABLE 4.4.**  
**COMPARISON ON THE LEVEL OF DEPRESSION AMONG DEPRESSIVE**  
**PATIENTS IN EXPERIMENTAL GROUP**

(N=12)

| Score     | Mean  | Mean% | SD   | Mean difference | 't'    |
|-----------|-------|-------|------|-----------------|--------|
| Pre test  | 65.83 | 67.12 | 2.05 | 25.28           | 17.44* |
| Post test | 57.07 | 45.18 | 1.01 |                 |        |

\* Significant at 0.05 level

From the above table, the mean score of depressive patients before receiving music therapy for the experimental group was 65.83 and it was decreased to 57.07 after intervention to test the significance in the mean difference paired 't' test was applied. The calculated 't' value is 17.44 and the table was 2.262 at 5 degrees of freedom with 0.05 level of significance. The calculated value was higher than the table value. Thus, the alternative hypothesis  $H_1$ : **"There is a significant difference in depression level among experimental group before and after music therapy"** was accepted. Hence, there existed a significant effect on administration of music therapy on reducing the depression level among depressive patients.

**TABLE 4.5.**  
**COMPARISONS ON THE LEVEL OF DEPRESSION AMONG DEPRESSIVE**  
**PATIENTS IN CONTROL GROUP**

(N=12)

| Score     | Mean  | Mean% | SD   | Mean difference | 't'    |
|-----------|-------|-------|------|-----------------|--------|
| Pre test  | 65.66 | 82.13 | 2.13 | 11.12           | 2.262* |
| Post test | 57.66 | 71.25 | 1.48 |                 |        |

\* Significant at 0.05 level

The mean score of depressive patients in control group of pretest shows a score of 65.66 and the post test was slightly decreased to 57.66 without intervention. Paired 't' test was used to test the significance in the mean difference. The calculated 't' value was 2.262 and the table value was 2.968 at 5 degrees of freedom with 0.05 level of significance. The calculated value was lower than the table value, thus the hypothesis  $H_{02}$ : **"There is no significant difference in depression level among control group before and after music therapy"** was accepted. This proved that there is no significant difference in depression among control group without the intervention.

**TABLE 4.6.**  
**COMPARISON ON THE LEVEL OF DEPRESSION AMONG DEPRESSIVE**  
**PATIENTS IN EXPERIMENTAL GROUP AND CONTROL GROUP AFTER**  
**INTERVENTION**

(N=12)

| Intervention       | Mean  | Mean% | SD   | 't'   |
|--------------------|-------|-------|------|-------|
| Experimental Group | 45.66 | 57.12 | 3.25 | 2.32* |
| Control Group      | 57.66 | 71.25 | 6.19 |       |

\* Significant at 0.05 level

From the above table, calculated 't' value is 2.32 and the tabulated value is 2.16 at 10 degrees of freedom with 0.05 level of significant. There is a difference between calculated 't' value and tabulated value. Thus the hypothesis H<sub>2</sub>: **“There is a significant difference in depression level among experimental and control group after music therapy”** was accepted. This proved that the music therapy had a significant role in reducing the depression level among depressive patients.

## **RESULTS AND DISCUSSION**

The study was conducted in Sri Krishna nursing home and Naveen psychiatric hospital, Coimbatore with the aim of examining the effect of music therapy on depression among the depressive patient. The depression level of the participants was assessed before and after music therapy by using Zung Depression Rating Scale. The results of depression level were compared, interpreted and discussed in this chapter.

### **5.1. FINDINGS RELATED TO BASELINE DATA**

In the present study out of 12 samples, 42 % of them were 41-50years old, and 34 % them were 30 – 40 years old and 24 % of them are 51-60 years old. With regards to the educational status 75 % of the participants have completed higher secondary, 17 % of them have completed elementary education and 8 % of them have completed graduation. With regards to gender, 58 % of them were females and 42 % of them were males. With respect to the marital status of the participants 92 % of them are married and 8 % of them are unmarried.

### **5.2. DISTRIBUTION OF LEVEL OF DEPRESSION**

The level of depression among the depressive patients was assessed using the Zung Depression Rating Scale. On assessment the level of depression in the experimental and control group was found that 100 % of participants had moderate depression before the administration of music therapy.



### **5.3. COMPARISON ON THE LEVEL OF DEPRESSION AFTER ADMINISTRATIONAL MUSIC THERAPY**

The 't' test was used to find out the significance of music therapy on the level of depression. The calculated 't' value of depression score was much higher than the table value. Hence, it is proved that there is a significant effect of music therapy on the level of depression. The calculated 't' value obtained for the level of depression are 2.32 and compared with the table value 2.168 at 10 degrees of freedom with 0.05 level of significance. The calculated value was higher than the table value. Thus, alternative hypothesis  $H_2$ : **“There is a significant difference in depression level among experimental and control group after music therapy”** was accepted. Hence, there exists a highly significant effect of music therapy on depression. This proved that music therapy has greater impact in reduction of depression among depressive patients.

### **5.4. DISCUSSION**

The present study is in line with the studies conducted by Wei chi hsu and Hui ling (2004), Mishja (2009), Heldal (2000), Polman Ra (2001), Mcmillan (2006), Siedliecki and Good (2005), Mythily (2002) and Dobra (2008) the intervention employed in the above mentioned studies are different types of music which has made an impact reducing the level of depression. Although music plays a major therapeutic role in curing psychiatric conditions which are evidenced in various scientific works carried out by eminent researchers throughout the world whereas Indian cultural music has been utilized in the present investigation for the present population herein studied. Depending upon the cultures, different types of music are usually adopted not only for the therapeutic purpose but also for the enjoyment of music. Present study

revealed that there is a decrease in the depression after music therapy administered for consecutive 15 days. Populations herein studied are south Indians and intervention here adapted was also south Indian cultural music. Hence, the culture customs of the community intervened that the cultural music this has played major role in influencing the depression condition

## **SUMMARY AND CONCLUSION**

The present chapter summarizes the major findings, limitations, implications in the field of nursing education, nursing practice, nursing research and recommendations.

The study was conducted to identify the effect of music therapy on depression among depressive patients. The study design was quasi experimental pre test- post test with control group design. The data was collected for a period of thirty days at Naveen psychiatric hospital and Sri Krishna Nursing Home, Coimbatore. The study was conducted on 12 samples. The depression was assessed by using the Zung depression scale before and after the music therapy.

### **6.1. MAJOR FINDINGS OF THE STUDY**

1. The depression was found to be high before the administration of music therapy.
2. After the administration of music therapy, the depression was found to be reduced among the depressive patients in experimental group.
3. The significant difference was identified between experimental and control group by comparing the level of depression before and after the music therapy.

### **6.2. LIMITATIONS**

1. The study was limited only to depressive patients who are literate
2. Size of the sample was small and the data collection was for the shorter period which limits generalization.

### **6.3. IMPLICATIONS**

#### **6.3.1. Nursing Education**

Depression is one of the most common psychological problems, affecting nearly everyone through either personal experience or through depression in a family member. In depth curriculum on music therapy can be included in mental health nursing curriculum to improve the patient care, comfort and provide better quality of life for the patients.

#### **6.3.2. Nursing Practice**

Depression is one of the most common psychological problems. Music therapy can be administered to promote comfort and wellbeing of depressive patients. Nursing policies can be formulated to implement music therapy along with routine nursing care

#### **6.3.3. Nursing Research**

The nursing research need to focus on the evidence based and holistic practice by understanding the different and varied techniques that can bring about significant physical and psychological outcomes for depressive patients undergoing treatment.

The nursing research intends to offer an up to-date suggestion in implementing proper technique of music therapy as one of the nursing care for reduce the depression and thereby the quality of life.

### **6.4. RECOMMENDATIONS**

1. All staff nurses can be trained to implement music therapy as a nursing intervention which reduces depression.

2. Further research can be carried out to find out the effect of music on other mental illness
3. The primary care givers can be trained to practice administer music therapy in home setting.

## **6.5. CONCLUSION**

Depression is most common mental disorder. Depression is the state of low need and aversion to activity that can affect a person's thought, behavior feeling and physical wellbeing. Music therapy is one of the innovative non pharmacological therapies that can be administered easily which it is cost effective and do not compromise with the patients' privacy. Hence music therapy is proved to be one of the effective therapies to reduce the level of depression among depressive patients.

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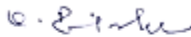
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**APPENDIX – V**  
**CERTIFICATE FOR ENGLISH EDITING**

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the dissertation, “Effectiveness of Music Therapy on Depression among Depressive Patients at Selected Psychiatric Hospitals, Coimbatore”.  
Aun Roy. J, M.Sc. (N) – II yr. College of Nursing, Sri Ramakrishna Institute of  
Paramedical Sciences, Coimbatore has been edited for English language appropriateness.

|                         |   |   |
|-------------------------|---|---|
| Name                    | : | K.RAJASEKAR   |
| Designation             | : | ASSOCIATE PROFESSOR, PHYSICS  |
| Name of the Institution | : | KONGUNADU ARTS & SCIENCE COLLEGE,<br>COIMBATORE -29                                 |
| Signature               | : |  |

**APPENDIX –VI**  
**CERTIFICATE FOR TAMIL EDITING**

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that the dissertation, "Effectiveness of Music Therapy on Depression among Depressive Patients at Selected Psychiatric Hospitals, Coimbatore".  
Arun Roy. J, M.Sc. (N) – II yr. College of Nursing, Sri Ramakrishna Institute of  
Paramedical Sciences, Coimbatore has been edited for Tamil language appropriateness.

Name : K. PARIATHAM

Designation : TEACHER (TAMIL) M.A., MPhil, B Ed

Name of the Institution : SRI RAMAKRISHNA MATRIC HIGHER SECONDARY SCHOOL

Signature *K. Pariatham*

SRI RAMAKRISHNA MATRIC HIGHER SECONDARY SCHOOL  
[Established by the S.R.K. Trust (Charitable Trust)]  
S.R.K. College Road, Coimbatore - 641 006

FORMAT FOR CONTENT VALIDITY

Name of the expert: DR. MARIKANNAN, M.D, (PSYCHIATRY),

Address: CONSULTANT PSYCHIATRIST,  
CMCH HOSPITAL  
COIMBATORE

Kindly validate each tool and tick wherever applicable

| S.No | Sections of the tool | Strongly agree | Agree | Needs modification | Remarks |
|------|----------------------|----------------|-------|--------------------|---------|
| 1    | SECTION A            |                | ✓     |                    |         |
| 2    | SECTION B            |                | ✓     |                    |         |
| 3    | SECTION C            |                | ✓     |                    |         |

Total content for the tool : Adequate / Inadequate ✓

Date: 10/11/16

  
Signature of the expert

From,  
Arun Roy. J,  
M.Sc. Nursing- I year,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore- 44.

To

DR. MARIKANNAN, M.D. (PSYCHIATRY),  
CONSULTANT PSYCHIATRIST,  
CMCH HOSPITAL  
COIMBATORE

Through  
The Principal,  
College of Nursing,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore -44.

Sub: Requisition for content validity

Respected Sir,

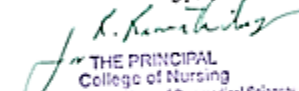
I Mr. Arun Roy doing M.Sc.Nursing I year in College of Nursing, Sri Ramakrishna Institute of Paramedical Sciences, as a part of my curriculum requirement under the Tamil Nadu Dr. M.G.R. Medical University has to conduct research. I have selected study on "Effectiveness of Music Therapy on Depression among Depressive Patients at Selected Psychiatric Hospitals, Coimbatore"

I sincerely request to extend your guidance for my content validity.

Coimbatore

Date:

Thanking you,

  
THE PRINCIPAL  
College of Nursing  
Sri Ramakrishna Institute of Paramedical Sciences  
Coimbatore- 641004.

Yours faithfully,  
Arun Roy. J



# FORMAT FOR CONTENT VALIDITY

Name of the expert: Mrs. MEERA SARAVANAN, MSc (N)

Address: PROFESSOR,  
MENTAL HEALTH NURSING DEPARTMENT,  
PSC COLLEGE OF NURSING,  
COIMBATORE

Kindly validate each tool and tick wherever applicable

| S.No | Sections of the tool | Strongly agree | Agree | Needs modification | Remarks |
|------|----------------------|----------------|-------|--------------------|---------|
| 1    | SECTION A            |                | ✓     |                    |         |
| 2    | SECTION B            |                | ✓     |                    |         |
| 3    | SECTION C            |                | ✓     |                    |         |

Total content for the tool : Adequate /Inadequate

Date:

18/6/2011

Signature of the expert



From,  
Arun Roy. J,  
M.Sc. Nursing- I year,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore- 44.

To

Mrs. MITRA SARAVANAN, MSc (N)

PROFESSOR,  
MENTAL HEALTH NURSING DEPARTMENT,  
PSG COLLEGE OF NURSING,  
COIMBATORE

Through  
The Principal,  
College of Nursing,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore -44.

Sub: Requisition for content validity

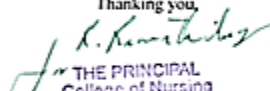
Respected Madam,

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Coimbatore

Date:

Thanking you,  
  
THE PRINCIPAL  
College of Nursing  
Sri Ramakrishna Institute of Paramedical Sciences  
Coimbatore-641004.

Yours faithfully,  
Arun Roy. J



# FORMAT FOR CONTENT VALIDITY

Name of the expert: Mr.BASKARAN, MSc.(N)

Address: ASSISTANT PROFESSOR,  
MENTAL HEALTH NURSING DEPARTMENT,  
PSG COLLEGE OF NURSING,  
COIMBATORE

Kindly validate each tool and tick wherever applicable

| S.No | Sections of the tool | Strongly agree | Agree | Needs modification | Remarks |
|------|----------------------|----------------|-------|--------------------|---------|
| 1    | SECTION A            | ✓              |       |                    |         |
| 2    | SECTION B            | ✓              |       |                    |         |
| 3    | SECTION C            | ✓              |       |                    |         |

Total content for the tool : Adequate /inadequate

Date: 9/6/11

*M. Baskaran*  
Signature of the expert  
M. BASKARAN  
ASSISTANT PROFESSOR  
PSG COLLEGE OF NURSING,  
PELLAMEDDU,  
COIMBATORE - 4.



From,  
Arun Roy. J,  
M.Sc. Nursing- I year,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore- 44.

To

Mr.BASKARAN, MSc(N)

ASSISTANT PROFESSOR,  
MENTAL HEALTH NURSING DEPARTMENT,  
PSC COLLEGE OF NURSING,  
COIMBATORE

Through  
The Principal,  
College of Nursing,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore -44.

Sub: Requisition for content validity

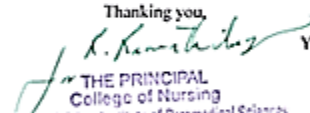
Respected Sir,

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Coimbatore

Date:

Thanking you,  
  
THE PRINCIPAL  
College of Nursing  
Sri Ramakrishna Institute of Paramedical Sciences  
Coimbatore - 641004.

Yours faithfully,

Arun Roy. J



FORMAT FOR CONTENT VALIDITY

Name of the expert: **Mrs. TAMILSELVI,**

Address: **PROFESSOR,  
MENTAL HEALTH NURSING DEPARTMENT,  
KG COLLEGE OF NURSING,  
COIMBATORE**

Kindly validate each tool and tick wherever applicable

| S.No | Sections of the tool | Strongly agree | Agree | Needs modification | Remarks |
|------|----------------------|----------------|-------|--------------------|---------|
| 1    | SECTION A            |                | ✓     | -                  |         |
| 2    | SECTION B            |                | ✓     | -                  |         |
| 3    | SECTION C            |                | ✓     | -                  |         |

Total content for the tool : Adequate /Inadequate

Date: 23/03/2011.

  
Signature of the expert

From,  
Arun Roy. J,  
M.Sc. Nursing- I year,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore- 44.

To

Mrs. TAMILSELVI,

PROFESSOR,  
MENTAL HEALTH NURSING DEPARTMENT,  
KG COLLEGE OF NURSING,  
COIMBATORE

Through  
The Principal,  
College of Nursing,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore -44.

Sub: Requisition for content validity

Respected Madam,

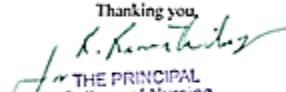
I Mr. Arun Roy doing M.Sc.Nursing I year in College of Nursing, Sri Ramakrishna Institute of Paramedical Sciences, as apart of my curriculum requirement under the Tamil Nadu Dr. M.G.R. Medical University has to conduct research. i have selected study on "Effectiveness of Music Therapy on Depression among Depressive Patients at Selected Psychiatric Hospitals, Coimbatore"

I sincerely request to extend your guidance for my content validity.

Coimbatore

Date:

Thanking you,

  
THE PRINCIPAL  
College of Nursing  
Sri Ramakrishna Institute of Paramedical Sciences  
Coimbatore-641004.

Yours faithfully,

Arun Roy. J



# FORMAT FOR CONTENT VALIDITY

Name of the expert: Mrs. ESTHER DAISY JOEL,

Address: PROFESSOR,  
MENTAL HEALTH NURSING DEPARTMENT,  
PSC COLLEGE OF NURSING,  
COIMBATORE

Kindly validate each tool and tick wherever applicable

| S.No | Sections of the tool | Strongly agree | Agree                               | Needs modification | Remarks |
|------|----------------------|----------------|-------------------------------------|--------------------|---------|
| 1    | SECTION A            |                | <input checked="" type="checkbox"/> |                    |         |
| 2    | SECTION B            |                | <input checked="" type="checkbox"/> |                    |         |
| 3    | SECTION C            |                | <input checked="" type="checkbox"/> |                    |         |

Total content for the tool : Adequate /Inadequate

Date:

6/6/11



Signature of the expert

From,  
Arun Roy. J,  
M.Sc. Nursing- I year,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore- 44.

To

PROF. ESTHER DAISY JOEL,  
PROFESSOR,  
MENTAL HEALTH NURSING DEPARTMENT,  
PSC COLLEGE OF NURSING,  
COIMBATORE

Through  
The Principal,  
College of Nursing,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore -44.

Sub: Requisition for content validity

Respected Madam,

I Mr. Arun Roy doing M.Sc.Nursing I year in College of Nursing, Sri Ramakrishna Institute of Paramedical Sciences, as apart of my curriculum requirement under the Tamil Nadu Dr. M.G.R. Medical University has to conduct research. i have selected study on "Effectiveness of Music Therapy on Depression among Depressive Patients at Selected Psychiatric Hospitals, Coimbatore"

I sincerely request to extend your guidance for my content validity.

Thanking you,

Coimbatore

Date:

  
THE PRINCIPAL  
College of Nursing  
Sri Ramakrishna Institute of Paramedical Sciences  
Coimbatore- 641004.

Yours faithfully,

Arun Roy. J



### FORMAT FOR CONTENT VALIDITY

Name of the expert: Dr.C. BALAKRISHNAMURTHY, Ph.D,

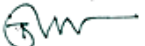
Address: ASSISTANT PROFESSOR AND PRINCIPAL INVESTIGATOR,  
UGC MAJOR RESEARCH PROJECT,  
DEPARTMENT OF PSYCHOLOGY,  
PSG COLLEGE OF ARTS & SCIENCE,  
COIMBATORE -14.

Kindly validate each tool and tick wherever applicable

| S.No | Sections of the tool | Strongly agree                      | Agree                    | Needs modification       | Remarks |
|------|----------------------|-------------------------------------|--------------------------|--------------------------|---------|
| 1    | SECTION A            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |         |
| 2    | SECTION B            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |         |
| 3    | SECTION C            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |         |

Total content for the tool : ☒ Adequate / ☐ Inadequate

Date: 10.4.2011

  
Signature of the expert

**APPENDIX – II**  
**LETTER REQUESTING TO VALIDATE THE RESEARCH TOOL**  
**AND CONTENT**

From,  
Arun Roy. J,  
M.Sc. Nursing- I year,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore- 44.

To

Dr.C. BALAKRISHNAMURTHY, Ph.D,

ASSISTANT PROFESSOR AND PRINCIPAL INVESTIGATOR,  
UGC MAJOR RESEARCH PROJECT,  
DEPARTMENT OF PSYCHOLOGY,  
PSG COLLEGE OF ARTS & SCIENCE,  
COIMBATORE -14.

Through  
The Principal,  
College of Nursing,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore -44.

Sub: Requisition for content validity

Respected Sir,

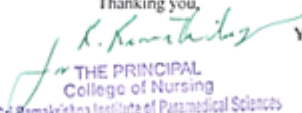
I Mr. Arun Roy doing M.Sc.Nursing I year in College of Nursing, Sri Ramakrishna Institute of Paramedical Sciences, as apart of my curriculum requirement under the Tamil Nadu Dr. M.G.R. Medical University has to conduct research. i have selected study on "Effectiveness of Music Therapy on Depression among Depressive Patients at Selected Psychiatric Hospitals, Coimbatore"

I sincerely request to extend your guidance for my content validity.

Thanking you,

Coimbatore

Date:

  
for THE PRINCIPAL  
College of Nursing  
Sri Ramakrishna Institute of Paramedical Sciences  
Coimbatore - 641004.

Yours faithfully,

Arun Roy. J

  
Arun Roy. J

**APPENDIX – I**  
**PERMISSION LETTER FOR CONDUCTING THE STUDY**

To  
**Dr Balu**  
The Director  
Krishna nursing home  
Ramnagar ,Coimbatore

Through  
**The Principal,**  
College of Nursing,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore -44.

Sub: Letter requesting permission for conducting the project.

Respected Sir,

I Mr. Arun Roy doing M. Sc. Nursing I year in College of Nursing, Sri Ramakrishna Institute of Paramedical Sciences, as apart of my curriculum requirement under the Tamil Nadu Dr. M.G.R. Medical University has to conduct research. i have selected study on "Effectiveness of Music Therapy on Depression among Depressive Patients at Selected Psychiatric Hospitals, Coimbatore" i would like to conduct the same study between 20/2011 to 20/6/2011 in your hospital.

I kindly request you to grant me permission to conduct project in your hospital. I assure you that I will abide by the rules of institution and information collected from the study the participants will not be disclosed.

Thanking you,

Yours faithfully,

Coimbatore

Date:

*Ar. Arun Roy*  
For **PRINCIPAL,**  
College of Nursing,  
Sri Ramakrishna Institute of Paramedical Sciences,  
Coimbatore - 641 044.

*Ar. Arun Roy*  
Arun Roy. J

*Dr. P. Balu*  
**Dr. P. BALU, M.B. Psychiatry,**  
Civil Surgeon Specialist in Psychiatry (Rtd)  
Tamil Nadu Medical Services  
KRISHNA NURSING HOME  
Ramnagar, Coimbatore-641 009,



## **APPENDIX - III**

### **TOOLS**

It consists of two sections

- Section I - Demographic profile
- Section II - Zung Depression Rating Scale

#### **Section - I**

#### **DEMOGRAPHIC PROFILE**

Sample No :

Age :

Sex :

Education :

Occupation :

Income :

Breadwinner  
of the family :

Type of the Family :

Social support :

No. of Dependents :

**Section -II**  
**ZUNG DEPRESSION RATING SCALE**

(William W.K. Zung)

Kindly read the following statements and check the mark (✓) in appropriate column.

| <b>Sl. No</b> | <b>Items</b>                              | <b>A little of the time</b> | <b>Some of time</b> | <b>Good part of the time</b> | <b>Most of the time</b> |
|---------------|---|-----------------------------|---------------------|------------------------------|-------------------------|
| 1             | I feel down-hearted and blue              |                             |                     |                              |                         |
| 2             | Morning is when I feel the best           |                             |                     |                              |                         |
| 3             | I have crying spells or feel like it      |                             |                     |                              |                         |
| 4             | I have trouble sleeping at night          |                             |                     |                              |                         |
| 5             | I eat as much as I used to                |                             |                     |                              |                         |
| 6             | I still enjoy sex                         |                             |                     |                              |                         |
| 7             | I notice that I am losing weight          |                             |                     |                              |                         |
| 8             | I have trouble with constipation          |                             |                     |                              |                         |
| 9             | My heart beats faster than usual          |                             |                     |                              |                         |
| 10            | I get tired for no reason                 |                             |                     |                              |                         |
| 11            | My mind is as clear as it used to be      |                             |                     |                              |                         |
| 12            | I find it easy to do the things I used to |                             |                     |                              |                         |
| 13            | I am restless and can't keep still        |                             |                     |                              |                         |
| 14            | I feel hopeful about the future           |                             |                     |                              |                         |

|    |   |  |  |  |  |
|----|---|--|--|--|--|
| 15 | I am more irritable than usual                        |  |  |  |  |
| 16 | I find it easy to make decisions                      |  |  |  |  |
| 17 | I feel that I am useful and needed                    |  |  |  |  |
| 18 | My life is pretty full                                |  |  |  |  |
| 19 | I feel that others would be better off if I were dead |  |  |  |  |
| 20 | I still enjoy the things I used to do                 |  |  |  |  |

### SCORING KEY

| Sl. No | Items                                     | A little of the time | Some of time | Good part of the time | Most of the time |
|--------|---|----------------------|--------------|-----------------------|------------------|
| 1      | I feel down-hearted and blue              | 1                    | 2            | 3                     | 4                |
| 2      | Morning is when I feel the best           | 4                    | 3            | 2                     | 1                |
| 3      | I have crying spells or feel like it      | 1                    | 2            | 3                     | 4                |
| 4      | I have trouble sleeping at night          | 1                    | 2            | 3                     | 4                |
| 5      | I eat as much as I used to                | 4                    | 3            | 2                     | 1                |
| 6      | I still enjoy sex                         | 4                    | 3            | 2                     | 1                |
| 7      | I notice that I am losing weight          | 1                    | 2            | 3                     | 4                |
| 8      | I have trouble with constipation          | 1                    | 2            | 3                     | 4                |
| 9      | My heart beats faster than usual          | 1                    | 2            | 3                     | 4                |
| 10     | I get tired for no reason                 | 1                    | 2            | 3                     | 4                |
| 11     | My mind is as clear as it used to be      | 4                    | 3            | 2                     | 1                |
| 12     | I find it easy to do the things I used to | 4                    | 3            | 2                     | 1                |
| 13     | I am restless and can't keep still        | 1                    | 2            | 3                     | 4                |
| 14     | I feel hopeful about the future           | 4                    | 3            | 2                     | 1                |
| 15     | I am more irritable than usual            | 1                    | 2            | 3                     | 4                |

|    |   |   |   |   |   |
|----|---|---|---|---|---|
| 16 | I find it easy to make decisions                      | 4 | 3 | 2 | 1 |
| 17 | I feel that I am useful and needed                    | 4 | 3 | 2 | 1 |
| 18 | My life is pretty full                                | 4 | 3 | 2 | 1 |
| 19 | I feel that others would be better off if I were dead | 1 | 2 | 3 | 4 |
| 20 | I still enjoy the things I used to do                 | 4 | 3 | 2 | 1 |

## APPENDIX - IV

### பகுதி – I

#### அடிப்படை புள்ளி விபரம்

மாதிரி எண் :

வயது :

பாலினம் :

கல்வித் தகுதி :

வேலை :

வருமானம் :

குடும்பத்திற்கு வருமானம் ஈட்டுபவர் :

குடும்பத்தின் வகை :

குடும்பத்தில் மன அழுத்தம் :

சமூக ஆதரவு :

மற்ற நோய்கள் :

சார்ந்து இருப்பவர்களின் எண்ணிக்கை :

மன அழுத்தத்தின் கால அளவு :

கீழே உள்ள வாக்கியங்களை நன்கு படித்து சரியான கட்டத்தில்  
அடையாளக் குறியீடு (✓) செய்யவும்

| வ.<br>எண். | கீழே உள்ள<br>கட்டத்தில் குறியீடு<br>செய்யவும் (✓)                           | மிக சில<br>தருணங்களில் | சில<br>சமயங்களில் | பெரும்பாலான<br>நேரங்களில் | எப்போதும் |
|------------|---|------------------------|-------------------|---------------------------|-----------|
| 1.         | நான் உடைந்த<br>மனதோடு<br>இருக்கிறேன்.                                       |                        |                   |                           |           |
| 2.         | காலை நேரம் தான்<br>நான் சிறப்பாக<br>இருப்பதாக<br>நினைக்கிறேன்.              |                        |                   |                           |           |
| 3.         | ஏனக்கு அடிக்கடி<br>அழுகை வரும்<br>அல்லது அழுகை<br>வருவது போல்<br>இருக்கும். |                        |                   |                           |           |
| 4.         | இரவில் தூங்குவது<br>சிரமமாக<br>இருக்கும் என்று<br>நினைக்கிறேன்.             |                        |                   |                           |           |
| 5.         | எப்போதும் போலவே<br>என்னால் சாப்பிட<br>முடிகிறது                             |                        |                   |                           |           |
| 6.         | இன்னும் என்னால்<br>உடல் உறவில்<br>இன்பம் கொள்ள<br>முடிகிறது.                |                        |                   |                           |           |
| 7.         | என்னுடைய எடை<br>குறைகிறது<br>என்பதை என்னால்<br>உணர முடிகிறது.               |                        |                   |                           |           |
| 8.         | எனக்கு மலச்சிக்கல்<br>உள்ளது.   |                        |                   |                           |           |
| 9.         | இயல்பாக<br>தூடிப்பதைக்  |                        |                   |                           |           |

|     |  |  |  |  |  |
|-----|--|--|--|--|--|
|     | காட்டிலும்<br>என்னுடைய<br>இருதயம் வேகமாக<br>துடிக்கிறது.                 |  |  |  |  |
| 10. | காரணமே<br>இல்லாமல் நான்<br>மிகவும் சோர்வு<br>அடைகிறேன்.                  |  |  |  |  |
| 11. | என்னுடைய<br>எண்ணம் முன்பு<br>போலவே தெளிவாக<br>இருக்கிறது.                |  |  |  |  |
| 12. | முன்பு போலவே<br>என்னால் எல்லா<br>வேலைகளும்<br>எளிதாக செய்ய<br>முடிகிறது. |  |  |  |  |
| 13. | நான் எப்போதும்<br>படபடப்பாகவே<br>இருக்க<br>முடியவில்லை.                  |  |  |  |  |
| 14. | எனக்கு என்<br>எதிர்காலத்தை<br>குறித்து எனக்கு<br>நம்பிக்கை உண்டு.        |  |  |  |  |
| 15. | இப்போதெல்லாம்<br>நான் அதிக<br>எரிச்சல்<br>அடைகிறேன்.                     |  |  |  |  |
| 16. | என்னால் மிக<br>எளிதாக முடிவுகள்<br>எடுக்க முடிகிறது.                     |  |  |  |  |
| 17. | என்னால் பிறருக்கு<br>உதவியாகவும்,<br>வேண்டியவனாகவும்<br>இருக்கிறேன்.     |  |  |  |  |



|     |  |  |  |  |  |
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| 18. | என்னுடைய<br>வாழ்க்கை<br>முழுமையாக<br>இருக்கிறது.   |  |  |  |  |
| 19. | நான் இறந்தால்<br>மற்றவர்கள் நலமாக<br>இருப்பார்கள்.   |  |  |  |  |
| 20. | நான் முன்பு<br>போலவே<br>இப்போதும் நான்<br>எல்லா<br>செயல்களிலும்<br>மகிழ்ச்சி<br>அடைகிறேன். |  |  |  |  |

## ANNEXURE – I

### Paired ‘t’ test

Paired ‘t’ test was applied to test the hypotheses ,when the scores of the same group, either experimental and control group were used to identify the effect of music therapy..

$$t = \frac{\bar{d}}{\frac{SD}{\sqrt{n}}}$$

$$SD = \sqrt{\frac{\sum (d - \bar{d})^2}{n}}$$

$$\bar{d} = \text{Mean of difference}$$

$$SD = \text{Standard deviation}$$

$$n = \text{Number of samples}$$

## ANNEXURE – II

### Unpaired ‘t’ test

Unpaired ‘t’ test was applied to test the hypotheses when the significant difference between the scores among the experimental and control group.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S} \sqrt{\frac{n_1 n_2}{n_1 + n_2}}$$

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

Where,  $\bar{X}_1$  = mean of the experimental group

$\bar{X}_2$  = mean of the control group

$n_1$  = pre test or post test scores of the experimental group

$n_2$  = pre test or post test scores of the control group

$S$  = Combined standard deviation